

TRIGEN[◇] INTERTAN[◇] Intertrochanteric Antegrade Nail achieves more reliable fixation of unstable intertrochanteric (IT) hip fractures than single screw nails

TRIGEN INTERTAN nail significantly reduces implant related failures and revisions by 81% and 65%, respectively



Study overview

- Systematic literature review and meta-analysis comparing implant related complications and outcomes with TRIGEN INTERTAN nail for the internal fixation of unstable IT fractures to single screw nails: Gamma3™ (Stryker) or PFNA™ (DePuy Synthes)
- Twelve randomized controlled trials and prospective observational studies were analysed



Key results

Implant failures, revision and non-union (Figure 1)

- TRIGEN INTERTAN nail significantly reduced the risk of implant related failures by 81% compared to single screw nails ($p < 0.00001$)
- TRIGEN INTERTAN nail significantly reduced the risk of revisions by 65% versus single screw nails ($p < 0.0001$)
- TRIGEN INTERTAN nail showed a favorable reduction in non-unions compared to single screw nails

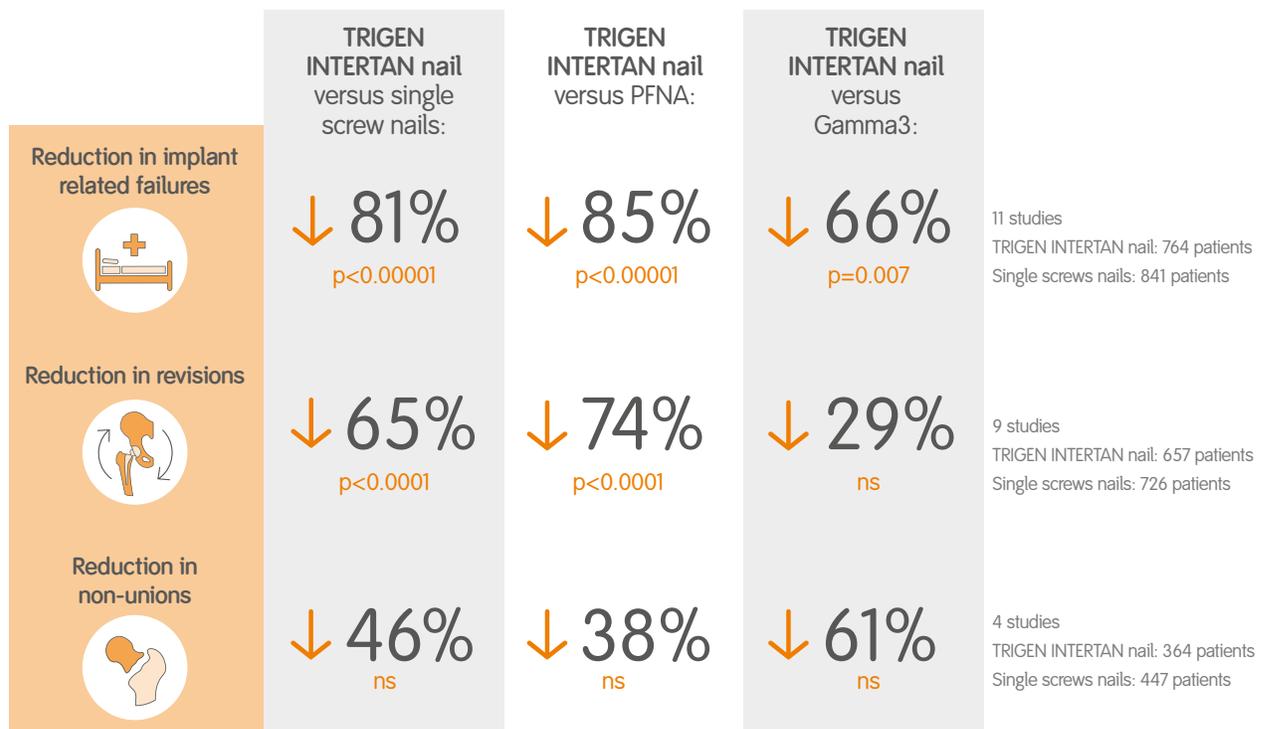


Figure 1. Implant related failures, revision, and non-union results. ns: not significant.

Evidence in focus (continued)



Key results

Postoperative functional outcomes, pain and health-related quality of life (HRQoL; Figure 2)

- TRIGEN® INTERTAN® nail significantly reduced hip and thigh pain by 45% versus single screw nails ($p=0.0009$)
- Harris Hip Score (HHS) was significantly improved with TRIGEN INTERTAN nail compared to single screw nails ($p=0.02$)
- HRQoL was significantly greater with TRIGEN INTERTAN nail compared to Gamma3™ ($p=0.002$)

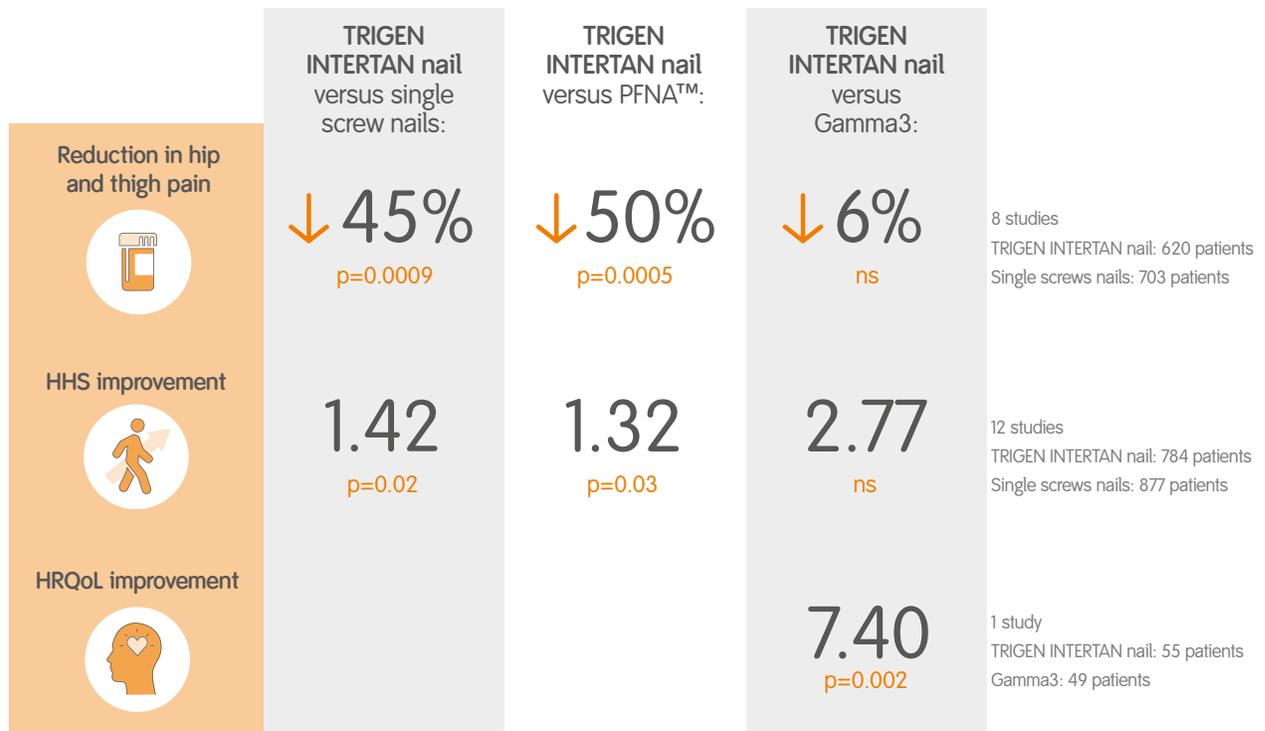


Figure 2. Postoperative functional outcomes, hip and thigh pain, and HRQoL. ns: not significant.



Conclusion

Compared to single screw nails, TRIGEN INTERTAN nail may offer patients more reliable fixation of unstable hip fractures, with improved postoperative results in terms of implant related complications, revision rate and functional outcomes, including pain.



Study citation

*Nherera LM, Trueman P, Horner A, Johnstone AJ, Watson JT. A meta-analysis of integrated compression screw compared to single screw nails using a single lag screw or single helical blade screw for intertrochanteric hip fractures. *Rheumatol Orthop Med*. 2018;3;1-10.

Available at: [Rheumatology and Orthopedic Medicine](#) 